Abstract

A problem of the invention is to provide a reduction device at low cost capable of considerably alleviating a restriction on a range of operating each shaft of a robot by providing a communication hole at a center portion and wiring a wire-like member therein while using a main bearing having an optimum load capacity.

According to the invention, in a reduction device of a rotating shaft (first shaft) having a large gear a position of which is fixed to a robot base and a small gear brought in mesh with the large gear and axially supported in a rotating barrel portion, the large gear and the small gear are arranged at a vicinity of a rotational plane of a second shaft (front/rear shaft), further, in the reduction device of the rotating shaft (first shaft) having a small gear axially supported by a robot base and a large gear which is brought in mesh with the small gear and a position of which is fixed to a rotating barrel portion, a large gear and a small gear are arranged at a vicinity of the rotational plane of the second shaft (front/rear shaft).